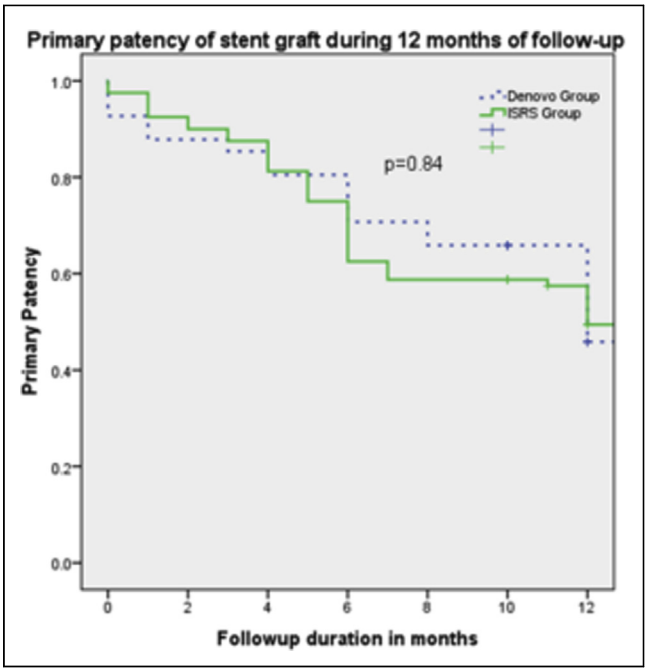
Variable	ISRS Group (N= 98)	Denovo Group (N= 65)	P (<0.05)	Odds Ratio (CI)
Primary patency (Primary Endpoint)	41/81 (51%)	20/41 (49%)	0.84	1 (0.5-2.2)
Secondary Endpoint	66/98 (67%)	37/65 (57%)	0.17	1.5 (0.8-2.9)
Cumulative blockage (ISRS+ Re-occlusion)	58/98 (59%)	28/65 (43%)	0.04	1.96 (1-3.6)
Restenosis	35/98 (47%)	20/65 (35%)	0.09	1.6 (0.7-3.2)
Target Lesion Revascularization	57/98 (58%)	16/65 (25%)	<0.0001	4.2 (2.1-8.5)
TLR (Percutaneous Intervention)	51/98 (52%)	14/65 (22%)	<0.0001	3.9 (1.9-8)
TLR (Surgical revascularization)	21/98 (21%)	3/65 (5%)	0.003	5.6 (1.6-19)
Amputation	18/98 (18%)	15/65 (23%)	0.46	0.7 (0.3-1.6)

Primary Endpoint: Primary patency at 12 month of follow-up by either angiogram or Doppler scan
Secondary Endpoint: Amputation, Cumulative blockage (ISRS +Thrombotic re-occlusion), TLR (Percutaneous intervention and surgical revascularization)



CONCLUSIONS Stent graft treatment using the Gore Viabahn for De novo and ISRS in femoro-popliteal arterial obstructive disease have high restenosis and failure rates, of both stent patency and limb outcomes, which is consistent with existed literature. Failure of stent grafts, used to treat ISRS associated with higher rates of TLR, occlusion requiring bypass, compared to De novo lesions.

CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention

KEYWORDS Femoropopliteal artery, In-stent restenosis, Prognosis

TCT-799

Antiplatelet Prescription Trends During Lower Extremity Peripheral Artery Endovascular Interventions: Insights from the XLPAD Registry

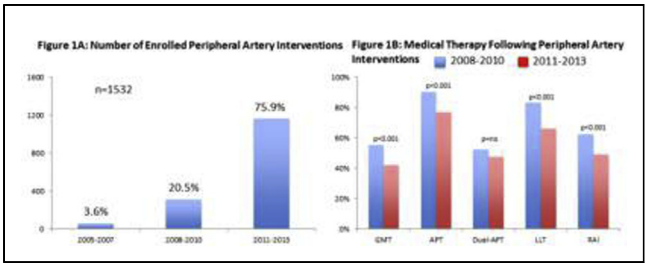
Denizen Kocak,[1] Kyle Planchard,[2] Thomas M. Das,[3] Atif Mohammad,[4] Ehrin J. Armstrong,[5] Nicolas W. Shammas,[6] Osvaldo Gigliotti,[7] Andrew Klein,[8] Mazen Abu-Fadel,[9] Tayo Addo,[10] Emmanouil Brilakis,[11] Subhash Banerjee[12]
[1]UT Southwestern Medical School, Dallas, TX; [2]UT Southwestern Medical Center, Dallas, TX; [3]University of Texas Southwestern Medical Center, Dallas, TX; [4]UT Southwestern Medical Center, Dallas, TX; [5]University of Colorado, Denver, CO; [6]Midwest Cardiovascular Research Foundation, Davenport, IA; [7]Seton Heart Institute, Austin, TX; [8]St. Louis VA Medical Center, St. Louis, MO; [9]University of Oklahoma HSC, Oklahoma City, OK; [10]UT Southwestern Medical Center, Dallas, United States; [11]VA North Texas Healthcare System and UT Southwestern Medical Center, Dallas, TX; [12]UT Southwestern Medical Center and VA North Texas Health Care System, Dallas, TX, Dallas, TX

BACKGROUND Despite an exponential rise in lower extremity peripheral artery interventional (PAI) procedures in patients with symptomatic peripheral artery disease (PAD) over the last decade, adherence to guideline-based medical therapy (GMT) post-revascularization has not been well described.

METHODS We analyzed PAIs registered in the Excellence in Peripheral Artery Disease (XLPAD) registry (NCT01904851) from 13 U.S. centers between 2005 and 2013 and evaluated adherence to GMT which is comprised antiplatelet therapy (APT), lipid-lowering therapy (LLT) and renin-angiotensin pathway inhibitors (RAI) with angiotensin receptor blockers (ARB) and angiotensin converting enzyme inhibitors (ACEI).

RESULTS Analysis of 1532 PAI in the study periods (n=55 in 2005-2007; n=314 in 2008-2010 and n=1,163 in 2011-2013) demonstrates an exponential rise in PAIs, consistent with national U.S. trends. Nevertheless, this rise in PAI was not accompanied with an equally robust adherence to GMT. Excluding, the limited number of patients enrolled from 2005-2007, the period between 2008 and 2013, demonstrates suboptimal adherence to GMT across all therapy groups (Figure 1). APT prescriptions fell from 90% to 77%, between 2008-2010 and 2011-2013 ($p<0.001$), and dual-APT prescriptions remained consistently low during the periods (53% vs. 48%). Consistent with the overall trend of dropping adherence to GMT between the periods 2008-2010 and 2011-2013 (55% vs. 42%; $p<0.001$), individual prescription of LLT and RAI were also significantly lower (83% vs. 66% for LLT; $p<0.001$ and 62% vs. 49% for RAI; $p<0.001$), respectively. During the same periods, all-cause death and non-fatal myocardial infarction (MI) rates were 7% and 5%, and need for repeat endovascular revascularization (RR) rates remain high at 28% and 19% for the periods 2008-2010 and 2011-2013, respectively.

CONCLUSIONS Given the high death, MI and RR rates in patients undergoing PAI, and suboptimal adherence to GMT, there is an urgent need for national performance standards to monitor GMT in patients with PAD.



CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention

TCT-800

Abstract Withdrawn

TCT-801

Surgical versus Endovascular Treatment for Acute Limb Ischemia: A Systematic Review and Meta-Analysis of Clinical Trials

Jad Omran,[1] Obai Abdullah,[2] Belal Firwana,[3] Beau Hawkins,[4] Mazen Abu-Fadel,[4] Christopher White,[5] William A. Gray,[6] Herbert Aronow,[7] Ashraf Al-Dadah[8]
[1]University of Missouri-Columbia, Columbia, MO; [2]University of Florida, Gainesville, FL; [3]University of Missouri-Columbia, Columbia, MO; [4]University of Oklahoma HSC, Oklahoma City, OK; [5]Ochsner Medical Center, New Orleans, LA; [6]Columbia University Medical Center, New York, United States; [7]St. Joseph Mercy Hospital, Ann Arbor, MI, Ypsilanti, United States; [8]Prairie Cardiovascular Consultants, Ltd., Springfield, IL

BACKGROUND A number of small studies have suggested that outcomes following endovascular therapy (ENDO) are comparable to those following surgical revascularization (SURG) for patients presenting with acute limb ischemia (ALI). We sought to compare mortality, limb amputation and recurrent ischemia across both strategies.

METHODS MEDLINE, EMBASE and CENTRAL electronic databases were comprehensively searched from January 1990 through May 2015 to identify studies of ENDO versus SURG for ALI. Two independent reviewers selected studies and extracted the data. Random-effects meta-analysis was used to pool results across studies. Heterogeneity of treatment effect among trials was assessed using the I2 statistics. The primary endpoints were mortality and limb amputation at 1, 6 and 12 months. Secondary endpoint was recurrent ischemia at one year.

						Endovascular Intervention (ENDO)						Surgical Intervention (SURG)		
Study/Year	N	Study primary endpoint(s)	Recurrent Ischemia	Death at 1 months	Death at 6 months	Death at 1 year	Amputation at 1 months	Amputation at 6 months	Amputation at 1 year	N	Recurrent Ischemia	Death at 1 month	Death at 6 months	Death at 1 year	Amputation at 1 months	Amputation at 6 months	Amputation at 12 months
Comerota 1996 (STILE II)	78	Death/Amputation/ Recurrent Ischemia	57	3	N/A	5	6	N/A	14	46	23	0	N/A	0	7	N/A	14
Graor 1994 (STILE)	248	Death/Amputation/ Recurrent Ischemia	134	10	16	N/A	13	29	N/A	144	37	7	12	N/A	9	15	N/A
Nilson 1991	11	Recurrent Ischemia	6	0	N/A	N/A	0	N/A	N/A	9	3	0	N/A	N/A	2	N/A	N/A
Ouriel 1996 (TOPAS)	155	Amputation free survival at 6 months	N/A	6	11	14	15	31	43	58	N/A	3	7	9	8	15	20
Ouriel 1998	272	Amputation free survival at 6 months	N/A	23	43	54	45	48	58	272	551	16	33	46	31	41	51
Taha 2015	154	Limb salvage/ survival	75	4	N/A	19	10	N/A	20	326	140	39	N/A	110	44	N/A	64
Weaver 1996	150	Death/Amputation/ Recurrent Ischemia	79	6	11	16	4	10	15	87	20	7	11	13	0	0	0

RESULTS A total of 1947 patients were included from 7 studies (6 prospective and 1 retrospective) comparing ENDO and SURG in the setting of ALI. Mean age was 67 years and 65% of patients were male. There was no difference in mortality between groups at 1 (risk ratio [RR] for ENDO vs. SURG is 0.72, 95% confidence interval [CI] 0.36 to 1.42), 6 (RR 0.85, CI 0.55 to 1.32) or 12 months (RR 0.72, CI 0.39 to 1.35). Similarly, there was no difference in limb amputation rates across groups at 1 (0.79, CI 0.48 to 1.29), 6 (RR 1.07, CI 0.73 to 1.55) or 12 months (RR 0.85, CI 0.58 to 1.25). ENDO was associated with significantly greater likelihood of recurrent ischemia at one year compared with SURG (RR 1.64, CI 1.19 to 2.26).

CONCLUSIONS In patients presenting with ALI, ENDO and SURG approaches have similar associated rates of mortality and limb amputation, but recurrent ischemia is more likely following ENDO.

CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention

KEYWORDS Acute limb ischemia, Endovascular therapy, Surgery

TCT-802

Meta-Analysis of Drug-Coated Balloon Versus Standard Balloon Angioplasty for Treatment of Infrapopliteal Lesions in Critical Limb Ischemia

Mohammad M. Ansari,[1] Daniel C. Garcia,[2] Rhanderson N. Cardoso,[3] Cesar Mendoza,[4] Jihad A. Mustapha,[5] Fadi Saab,[6] Larry J. Diaz-Sandoval[6]

[1]University of Miami- Jackson Memorial Hospital, New York, NY; [2]Ochsner Clinic Foundation, New Orleans, LA; [3]University of Miami/ Jackson Memorial Hospital, Miami, FL; [4]Jackson Memorial Hospital, Miami, FL; [5]Metro Health Hospital, Wyoming, United States; [6]Metro Health Hospital, Grand Rapids, MI

BACKGROUND Drug-Coated Balloon (DCB) angioplasty has emerged as a feasible and effective option for the treatment of infrapopliteal (IP) arterial lesions in patients with critical limb ischemia (CLI), with good patency and amputation-free survival rates, as well as low rates